IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jason Charles PELLY et al.

U.S. Serial No.:   Filed Concurrently Herewith
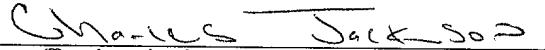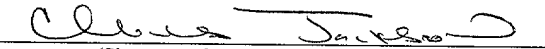
Title of Invention: EMBEDDING DATA IN MATERIAL

745 Fifth Avenue
New York, NY 10151

EXPRESS MAIL

Mailing Label Number: EV001579405US

Date of Deposit: December 6, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Service under 37 CFR 1.10 on the date indicated above and is addressed to the U.S. Patent and Trademark Office, P.O. Box 2327, Arlington, VA 22202

_____
(Typed or printed name of person mailing paper or fee)

_____
(Signature of person mailing paper or fee)

PRELIMINARY AMENDMENT

U.S. Patent and Trademark Office
Box Patent Application
P.O. Box 2327, Arlington, VA 22202

Sir:

Before the issuance of the first Office Action, please amend the above-identified

application as follows:

IN THE CLAIMS:

Amend claims 43, 59, 60, 61 and 62 to read as follows:

43.   (Amended) A method of embedding data in material, comprising the steps of:

producing transform coefficients C_i of the material;

comparing the magnitudes of the coefficients with a threshold value T; and

producing, from the coefficients C_i and the said data, modified coefficient

values Ci' which are modified by respective information symbols of a pseudo random symbol sequence modulated by the said data to be embedded;

wherein the said step of producing modified coefficent values does not use coefficients of magnitude greater than the said threshold T and does not use the corresponding information symbols; and detecting the data by

receiving transform coefficients of the material;

comparing the magnitudes of the received coefficents with a threshold Tclip;

clipping, to a magnitude Tclip, the magnitude of coefficients of magnitude greater than the said threshold Tclip; and

correlating the clipped and unclipped coefficients with a pseudo random sybmol sequence to detect data embedded in the material.

59.   (Amended) A system including embedding apparatus, comprising :

a transformer for producing transform coefficients Ci of the material,

a comparator for comparing the magnitudes of the coefficients with a threshold value T, and

a combiner for producing, from the coefficients Ci and the said data, modified coefficient values Ci' which are modified by respective information symbols of a pseudo random symbol sequence modulated by the said data to be embedded, wherein the combiner does not use coefficients of magnitude greater than the said threshold T and does not use the corresponding information symbols; and detecting apparatus comprising:

an input for receiving transform coefficients of the material;

a comparator for comparing the magnitudes of the received coefficients with a threshold T; and

"Express Mail" mailing label number_____ EV001579405US

Date of Deposit_____ December 6, 2001_____

     I hereby certify that this paper or fee, and a patent application and accompanying papers, are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the U.S. Patent and Trademark Office, P.O. Box 2327, Arlington, VA 22202.

_____
(Typed or printed name of person mailing paper or fee)

_____
(Signature of person mailing paper or fee)

a correlator for correlating the said coefficients with respective symbols of a pseudo random symbol sequence to detect the said data, wherein the correlation does not use coefficients of magnitude greater than the said threshold T and the corresponding symbols of the pseudo random symbol sequence.

60.   (Amended) A method according to claim 32, wherein the said data comprises a UMID.

61.   (Amended) A method according to claim 32, wherein the said material comprises video material

62.   (Amended) A method according to claim 32, wherein the said material comprises audio material.

REMARKS

The claims have been amended to eliminate multiple dependencies. The filing fee is based upon this Preliminary Amendment. Attached hereto is a marked version of the changes made to the claims 43, 59, 60, 61 and 62. The attached pages are captioned **"Version with markings to show changes made."**

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicant

By: _____
William S. Frommer
Reg. No. 25,506
Tel. (212) 588-0800

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

43.   (Amended) A method of ~~comprising~~ embedding data in material, comprising the steps of:

producing transform coefficients C_i of the material;

comparing the magnitudes of the coefficients with a threshold value T; and

producing, from the coefficients C_i and the said data, modified coefficient

values C_i' which are modified by respective information symbols of a pseudo random symbol

sequence modulated by the said data to be embedded;

wherein the said step of producing modified coefficent values does not use coefficients of

magnitude greater than the said threshold T and does not use the corresponding information

symbols; and detecting the data by

receiving transform coefficients of the material;

comparing the magnitudes of the received coefficents with a threshold Tclip;

clipping, to a magnitude Tclip, the magnitude of coefficients of magnitude greater than

the said threshold Tclip; and

correlating the clipped and unclipped coefficients with a pseudo random sybmol

sequence to detect data embedded in the material ~~according to claim 41 or 42~~.

59.   (Amended) A system including ~~comprising~~ embedding apparatus, comprising:

a transformer for producing transform coefficients C_i of the material,

a comparator for comparing the magnitudes of the coefficients with a threshold value T,

and

a combiner for producing, from the coefficients C_i and the said data, modified coefficient

values C_i' which are modified by respective information symbols of a pseudo random symbol

sequence modulated by the said data to be embedded, wherein the combiner does not use coefficients of magnitude greater than the said threshold T and does not use the corresponding information symbols; and detecting apparatus ~~according to claims 54~~ comprising:

an input for receiving transform coefficients of the material;

a comparator for comparing the magnitudes of the received coefficients with a threshold T; and

a correlator for correlating the said coefficients with respective symbols of a pseudo random symbol sequence to detect the said data, wherein the correlation does not use coefficients of magnitude greater than the said threshold T and the corresponding symbols of the pseudo random symbol sequence.

60.   (Amended) A method ~~or apparatus~~ according to claim 32, wherein the said data comprises a UMID.

61.   (Amended) A method ~~or apparatus~~ according to claim 32, wherein the said material comprises video material

62.   (Amended) A method ~~or apparatus~~ according to claim 32, wherein the said material comprises audio material.